

REMARKS**I. Status of the Claims**

Claims 1-59 are pending in the application. Applicants appreciate the Examiner's allowance of Claims 38 and 39. Claims 1-37 and 40-59 stand rejected.

Applicants respectfully request reconsideration of the application in view of the amendments presented above and the following remarks.

II. The Finality of the Rejection Should be Withdrawn

On page 29 of the Office Action, the Examiner asserts that Applicant's amendment in response to the previous Office Action necessitated the new ground(s) for rejection, and the Examiner made the Office Action final. The Examiner accepted Applicants' remarks regarding the Freeman citation (US 6,194,900), and rejected certain claims (claims 1-37 and 40-59) over newly cited art - Webb et al. (US 6,456,072) and Kucharczyk (US 6,026,316). Applicants respectfully disagree that the amendment to the claims necessitated the new grounds of rejection.

As stated in the previous response filed on August 29, 2003, independent claims 1, 18, 19, 20 and 54 were amended to define the subject matter of those claims more clearly and to make those claims more user-friendly. These amendments did not change the scope or content of claims 1, 18, 19, 20 and 54. Thus, the amendment to the claims did not necessitate the new grounds for rejection, because the scope or content of the claims remained unchanged from the claims as originally filed. Accordingly, Applicants request withdrawal of the finality of the Office Action.

III. Information Disclosure Statements

Applicants filed an Information Disclosure Statement on June 5, 2002 and also filed Supplemental Information Disclosure Statements on October 2, 2002 and August 5, 2003.

Applicants appreciate the Examiner's indication on page 2 of the Office Action that these Information Disclosure Statements have been received, are in compliance with the requirements of 37 CFR 1.97 and are being considered.

IV. Amended Drawings

Applicants appreciate the Examiner's indication on page 3 of the Office Action that the amended drawings have been approved and are acceptable.

V. Amendments to the Specification

The Examiner maintains the requirement that disclosure originally made in the specification by incorporating publications by reference be made instead by expressly copying such material into the specification. The requirement is respectfully traversed.

As stated in the previous response, the publications incorporated by reference on pages 3, 4, 5 and 6 are listed in the background section, and M.P.E.P. 608.01(p) provides that it is proper and allowed to incorporate non-patent publications by reference if they are background or otherwise non-essential material.

Nonessential subject matter may be incorporated by reference to (1) patents or applications published by the United States or foreign countries or regional patent offices, (2) prior filed, commonly owned U.S. applications, or (3) non-patent publications ... See MPEP § 608.01. Nonessential subject matter is subject matter referred to for purposes of indicating the background of the invention or illustrating the state of the art.

Moreover, the Examiner has not identified any material in the incorporated publications as essential material. Also, the Examiner has not identified any failure or shortcoming of the application with respect to meeting the requirements of a complete application, including meeting the requirements of 35 U.S.C. § 112. Accordingly, the requirement to amend the

specification to expressly recite material currently incorporated by reference is deemed to be without foundation.

Nevertheless, through an abundance of prudence and to expedite prosecution of the application, and without any determination of whether or not material in the publications originally incorporated by reference contain essential or non-essential matter, Applicants have amended the specification above by deleting in certain the statement of incorporation by reference and by copying text from the referenced publications into the specification. A Declaration executed by Dr. Timothy L. Peck is enclosed herewith stating that the text added to the application is the same as text found in the publications formerly incorporated by reference.

VI. The Specification is Proper Under 35 U.S.C. 112, Second Paragraph

On pages 5-7 of the Office Action, the Examiner objects to the specification under 112, second paragraph, because the specification uses the phrases “for example,” “such as” and “or the like.” The Examiner asserts that the use of such phrases is impermissible in view of the requirement that Applicant’s disclosure particularly point out and describe the subject matter which Applicant regards as the invention. Applicants disagree with the Examiner’s interpretation of the applicable requirements and respectfully traverse the objection to the specification.

The use of the phrases “for example,” “such as” and “or the like” are customary and routine in US patent practice. In fact, M.P.E.P. 2173.05(d) states that it is proper to use the terms “for example” and “such as” in the specification. Moreover, 35 U.S.C. § 112, second paragraph provides no basis for objection to the specification. The plain language of 35 U.S.C. § 112, second paragraph, indicates that it is directed to the claims and not the specification:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

The terms “for example,” “such as” and “or the like” are not used in any of the claims, but, instead, are used in the specification to point out that the disclosed embodiments are only

exemplary of embodiments falling within the scope of the invention. Thus, 35 U.S.C. § 112, second paragraph, provides no basis for the subject objection to the specification. Nor does any other section of the statute forbid use of the phrases in question in the specification. Rather, use of the phrases in question in the specification is proper and is permitted under all applicable rules and statutes.

In view of the above, the objection to the specification is improper and Applicants request that the objection to the specification be withdrawn.

VII. Claims 1-27, 29, 31-37, 40-45, 49-52 and 54-59 are Patentable over Webb et al.

Claims 1-27, 29, 31-37, 40-45, 49-52 and 54-59 are rejected under § 103(a) over US 6,456,072 to Webb et al. Applicants respectfully traverse the rejection.

The subject claims are patentable over Webb et al. Webb et al. fails to teach or suggest an NMR system or an NMR probe or an NMR module comprising a controllable fluid router operative to direct fluid sample to multiple NMR detection sites. The subject claims include independent claims 1, 18, 19, 20, 54, and 56 and claims dependent from one or another of such independent claims. Each of the rejected independent claims recites a controllable fluid router operative to direct fluid sample to multiple NMR detection sites. In contrast, Webb et al. has no controllable fluid router operative to direct fluid sample to multiple NMR detection sites. Nor is there any reason or motivation to modify Webb et al to incorporate a controllable fluid router operative to direct fluid sample to multiple NMR detection sites, because each of the coils in Webb et al. has its own single, separate sample source. See Fig. 1 of Webb et al.

Since Webb et al. fails to teach or suggest an NMR system (or probe or module) comprising a controllable fluid router operative to direct fluid sample to multiple NMR detection sites, each of the independent claims 1, 18, 19, 20, 54, and 56 is patentable over Webb et al. For the same reason, of course, each of the subject claims dependent from any if independent claims 1, 18, 19, 20, 54, and 56 is also patentable over Webb et al.

What is asserted by the Examiner to be a fluid router in Webb et al. is, instead, an electronic switch or other associated electrical device. Component 24 of Webb et al. is referred

to as an “RF switch” and such switch is described as providing an electrical connection between RF coils 26A-26D or outputs 25A-25D and a spectrometer. When the RF switch of Webb et al. is connected with any one microcoil, an electrical pulse is passed from the spectrometer to the connected microcoil. The RF switch of Webb et al. is not, and cannot be, a fluid router operative to direct fluid samples to multiple NMR detection sites. Accordingly, Webb et al. does not render any of claims 1-27, 29, 31-37, 40-45, 49-52 or 55-59 obvious.

With respect to claim 54, the Examiner asserts that Webb et al. teaches an “enlarged void for holding fluid sample” based on the argument that the inlet and outlet ports of component 38 of Webb et al. are shown to be narrower in Figures 1 and 2. Applicants must respectfully disagree with the Examiner. The Examiner has taken too great a liberty with figures 1 and 2 in asserting that the inlet and outlet ports of element 38 are different in size. To rely on Figures 1 and 2 to support a claim rejection, the drawings must be evaluated for what they actually disclose and would suggest to one of ordinary skill in the art. When Figs. 1 and 2 of Webb et al. are carefully considered, the inlet ports and outlet ports or ends of element 38 are not noticeably different in size from each other or from the remainder of the capillary.

There simply is no disclosure in Webb et al. that capillary member 38 includes an enlarged void. Webb et al. discusses coil construction at Col. 6 and states that “each coil was fabricated ... and wrapped around a 355 um outer diameter (o.d.), 180 um inner diameter (i.e.) [sic; (i.d.)] ... fused silica capillary.” Webb et al. fails to disclose that the capillary could or should contain an enlarged void at the coil or that the diameter of the capillary varies. Accordingly, Webb et al. does not render claim 54 obvious.

For the reasons above, none of claims 1-27, 29, 31-37, 40-45, 49-52 and 54-59 are rendered obvious by Webb et al. Applicants request withdrawal of the rejection and allowance of the claims.

VIII. Claims 28, 30, 46-48 and 53 are Patentable over Webb et al. in view of Kucharczyk et al.

Claims 28, 30, 46-48 and 53 are rejected under § 103(a) over Webb et al. further in view of US 6,026,316 (hereafter “Kucharczyk et al.”). Applicants respectfully traverse the rejection.

For the reasons stated above, Webb et al. does not render any of claims 28, 30, 46-38 and 53 obvious. In particular, Webb et al. fails to teach or suggest an NMR system or an NMR probe or an NMR probe module comprising multiple NMR detection sites and a controllable fluid router operative to direct fluid sample to the multiple NMR detection sites. The deficiencies of Webb et al. are not cured by Kucharczyk et al. In particular, Kucharczyk et al. fails to each or suggest an NMR probe or an NMR probe module comprising multiple NMR detection sites and a controllable fluid router operative to direct fluid sample to the multiple NMR detection sites. For this reason alone, the combination of Webb et al. and Kucharczyk et al. does not render any of claims 28, 30, 46-48 or 53 obvious.

In addition, regarding claim 28, the Examiner's reference to Col. 18, lines 1-10 of Kucharczyk et al. fails to support the rejection, because it fails to teach or suggest that NMR detection sites are optimized for different sample sizes. Instead, this portion of Kucharczyk et al. teaches tailoring of the RF coils to a specific medical procedure. Tailoring of RF coils to a specific medical procedure is not the same as optimizing NMR detection sites for different samples sizes, e.g. changing the size and/or shape of the sample holding void. For this additional reason, the combination of Webb et al. and Kucharczyk et al. fails to render claim 28 obvious.

In addition, regarding claims 46-48, the Examiner's asserts that Kucharczyk et al. teaches, at Col. 19, lines 2-12, the detectors of the subject claims. Applicants disagree with the Examiner. The text referred to by the Examiner teaches radiation carrying elements, such as infrared radiation and ultraviolet radiation, in the delivery device. An infrared radiation carrying element is not an infrared detector, and an ultraviolet radiation carrying element is not an ultraviolet detector. While Kucharczyk et al. does mention certain detection elements at Col. 19, lines 8-11, an IR detector, a UV array detector or a photodiode array detector are not among them. For this additional reason, the combination of Webb et al. and Kucharczyk et al. fails to render any of claims 46-48 obvious.

For the reasons provided above, the combination of Webb et al. and Kucharczyk et al. fails to render any of claims 28, 30, 46-48 or 53 obvious. Applicants request withdrawal of the rejection and allowance of the claims.

IX. Claims 38 and 39 are Allowable

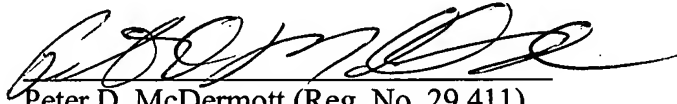
Applicants appreciate the Examiner's indication that claims 38 and 39 are allowable. Applicants would like to mention that each of claims 38 and 39 is novel and patentable based on its combination of elements, taking the claim as a whole, and not only based on the novel feature noted by the Examiner.

X. Conclusion

In view of the foregoing remarks, claims 1-59 are in condition for immediate allowance, and a Notice of Allowance is respectfully requested.

Respectfully submitted,
Peck et al.

26 March 2004
Dated


Peter D. McDermott (Reg. No. 29,411)
Attorney for Applicants
Banner & Witcoff, LTD.
28 State St. - 28th Floor
Boston, MA 02109
617.720.9600